

Ideas Have Consequences Three Philosophical Ideas that Changed the World

The Great Chain of Reason

Section 1: Introduction

Why do we study Berkeley, Aquinas and Hume today? What relevance do they have to our own lives? Did they affect the great events of history? Can we really take from them anything useful? As thinking people, each of us must answer those questions for ourselves. But to do so, we need to understand more of their story. We must first go back to their beginnings, before we can understand our present.

This is a strange story. At one level, it is the story of very difficult ideas, expressed in equally abstract and difficult language. On first reading, it seems to be a story interesting to only a small group of specialist scholars, of little practical value to the rest of us, especially in our routine daily lives. Yet, a deeper reading shows that this is a story of great interest and excitement, brimming with an endless flow of practical lessons. It is the amazing story of how an ancient Athenian gadfly, by asking nuisance questions, set in motion the greatest transformation of human life in human history. It is a story of how the way we live—and take for granted—came to be. It is the story of the beginnings of most of the benefits we enjoy today, and why others, in other cultures, in other regions of the world, want to be like us, yet why others, just as much a result, now see themselves in a fight to the death, determined to resist these same attractions.

Section 2: The Great Chain of Reason: Philosophy in the Ancient World

In class we began our study of philosophical thinking by reading and discussing the ideas of Bishop George Berkeley and St. Thomas Aquinas. St. Thomas' story is of great importance as the critical link that joins together the past, connecting the ideas of four thinkers of the ancient world, each a link in the *Great Chain of Reason*. From the Greeks: the chain starts with Socrates and Aristotle. It links the Greeks to the Romans: Sextus Empiricus and St. Augustine. So to help us understand the Chain and its impact upon our own way of life, we need to go back to the ancient world, to ancient Greece, more specifically to Athens, where it all began.

2.1 Socrates: Questioner and Unbearable Nuisance

The Athenian philosopher Socrates (470?-399 B.C.), earlier than Aristotle by about a century, initiated *Dialectic*, a fierce, interactive, no-holds-barred question-and-answer method of teaching as a means of achieving self-knowledge and understanding. He became famous for his relentless questioning of both the popular assumptions of so-called “common sense” and folk wisdom, as well as the grand speculations, philosophical theories and religious beliefs of the learned and powerful expert authorities of his time. Socrates became widely known as a goad and irritant, always picking away at beliefs that were thought to be too obvious to need justification, taken to be plain “common sense” but which he quickly showed were nonsense.

It got him into trouble. He was accused of impiety and of corrupting the young. To get rid of

him, a trial was contrived on the basis of these charges. He was convicted. His penalty was to be put to death by self-inflicted poisoning. Socrates own account of his role as questioner and teacher can be found in one of the great pieces of world literature: *The Apology*.

2.2 Aristotle: The Great Integrator (384-322 B.C.)

Aristotle was a student of Plato, who was a student of Socrates. Aristotle lived about a century after Socrates. A pre-Christian pagan, *Faith* was not a factor in his thinking. Aristotle is still to many the greatest Philosopher of all time. His contribution was to synthesize much of what had come to be known in the ancient world. Along with his other incredibly rich contributions to many fields of knowledge, his chief contribution to the *Great Chain of Reason* was his integration of *empirical observation* and *logic*, in what became known as *Reason*.

Despite the penalty paid by Socrates for pursuing independent thinking, the idea caught on. From Socrates, Plato and Aristotle, educated Greeks and Romans recognized the value of questioning, careful reasoning and measured observation, incorporating these into their core idea of what it was to be educated, hence capable of faring well in the world. Sextus Empiricus, (ca. 200 C.E.) for example, proposed many of the questions about the reliability of sensory information that we discussed as part of the first topic of this course.

Cultivation of habits and attitudes of relentless questioning, therefore, were an intrinsic part of pagan Greek and Roman education derived from the heritage of Socrates. From Aristotle, the heritage included instruction on the tools of inquiry to be used to deal with these questions and therefore, the standards to be met, for testing answers. They fell, primarily, under the subjects of *Reason*, which included Rhetoric and Logic.

The main tests of *Reason*, then, as now, were experience, clarity and coherence. No unevidenced statements or claims to know anything were acceptable, unless grounded in experience and logic. No folklore, pieties, or shibboleths no matter how deeply believed, by the general population would be accepted on the basis of popularity, custom, provenance or venerability. No high-sounding or seemingly profound pronouncements of the learned, no dogma or doctrine, no matter how ancient, no matter how much at the center of institutions and high authority, were to be accepted, simply at face value or on the basis of authority. Contradiction, inconsistency and incoherence were fatally unacceptable.

2.3 St. Augustine (A.D. 354-430): Faith Conquers All

With the coming of Christianity, first to the Roman Empire and then beyond, to Europe and what is now Russia and the vast steppes of Siberia, values and attitudes changed. *Reason* went out of style. In its place, there was now a basic set of beliefs, collected and codified in a fundamental, authoritative text, to be accepted on *Faith*, no matter what the contrary evidence or lack of any evidence at all, inconsistent and expressed in language that was abstruse and mysterious. These beliefs were to be accepted no matter how incoherent or otherwise difficult to accept on the basis of *Reason*.

What, supposedly, made them true? It was claimed that the truth of these beliefs were guaranteed by Revelation from transcendental sources, all this to be accepted on *Faith* alone—no Socratic probing allowed. These codified beliefs became Orthodoxy. Doubt and disagreement became dangerous. A central authority emerged to provide authoritative interpretation of doctrine and its application. Beliefs on these topics left out of Orthodoxy became heterodoxy and even heresy, if they were in opposition to Orthodoxy. Just as for Socrates, again it became personally risky to entertain, let alone advocate contrary views.

The principle of the priority of codified Faith was established by St. Augustine, an early Christian church father and philosopher who served (396-430) as the Bishop of Hippo (in present-day Algeria). He wrote the autobiographical *Confessions* (397) and the voluminous *City of God* (413-426). Henceforth, when ***Faith*** and ***Reason*** were in conflict, ***Faith***, authority and Doctrine would determine truth.

2.4 Into the Middle Ages

The Western Roman Empire ended in the fifth century. But in the East, as the Byzantine Empire, with Constantinople as its capital, it survived for another millennium, until the middle of the fifteenth century. During that time the Arabs in the seventh and eighth centuries conquered large segments of the Byzantine Empire, establishing up their own Islamic states.

Finally, in the fifteenth century, the Muslim Turks, conquered what remained of the Byzantine Empire as well as much of what had already become Arab. Thus, Muslims, while dominating much of the old Eastern Roman Empire, were influenced by many of the values, attitudes and culture and practices of the Christian Eastern Romans. This included belief in a foundational text, now the Koran, believed to be transcendently revealed from superhuman, super sensory sources, interpreted by a select hierarchy. The idea that ***Faith*** decides truth was now passed on so as to encompass an even wider cultural and geographical area than had been included within the original Roman Empire at the height of its power and influence.

Therefore, as with Christians and Jews, for Muslims too, the idea that *Faith* is the ultimate determinate of truth was the dominant outlook in the lands of former domains of the Roman and Byzantine Empires. When Christians came to the Western Hemisphere, this region came to include the New World, where the view that *Faith* is the ultimate determinate of truth supplanted the older competing views of the original inhabitants.

At it most influential, commitment to the primacy of ***Faith*** over ***Reason*** held sway in the Americas, Western, Central, Eastern and Southern Europe, the Russian and Central Asian steppes, the Levant, Africa North of the Sahara—and south of it in a few places. It stretched north and south from Russia and Siberia to the Indian subcontinent and even to Southeast Asia, and out into the Pacific, in the Philippines, for example. Even where rival faiths were in competition, the competitors shared a common belief in the necessity for a foundational text and for belief by ***Faith***, upheld by authority, often both civil and religious.

Section 3: The Beginnings of the Modern World

3.1 St Thomas Aquinas (1225-1274) and the Rediscovery of Aristotle

St. Thomas Aquinas re-enters our story: St. Thomas was an Italian Dominican monk, theologian, and philosopher. He is regarded as the outstanding representative of *Scholasticism*, applying Aristotelian methods to Christian Theology. His masterwork is *Summa Theologica* (1266-1273).

St. Thomas Aquinas breaks with what in his own time and culture, had become a thousand year old philosophical and theological given joining three otherwise conflicting faiths: ***Faith*** is the ultimate determinate of truth.

When St. Thomas appeared on the scene, Italy was the center of Western Christianity, commanding the allegiance of almost everyone in Europe who lived between the Mediterranean and the Atlantic, west, to the British Isles and north to Scandinavia. Most, if not all of the formerly barbarian pagans had been converted. Heretical sects have been vanquished. The Protestant Revolution had not yet occurred.

To the east, there was the Orthodox Christian Byzantine Empire. To the West, the Iberian Peninsula, today's Spain and Portugal, are Arab, Islamic in religious belief. At this time, the domain of Islamic religious belief stretched across North Africa and beyond. Christians, Jews and Muslims, shared a commitment to the late Roman Christian view, dominant since St. Augustine's time that ***Faith*** is the ultimate determinate of truth.

Everywhere, the technological, economic and social world of St. Thomas Aquinas, in the thirteenth century, had not much changed in the ten thousand or so years before his birth, when our species began to settle down to agriculturally based economies and hierarchically structured social forms, based upon simple technologies powered by animal and (often captive) human traction.

Since those early days, by St. Thomas' time, though conquerors and their empires have come and gone, and come and gone again and again, life has changed little. People were still helpless in the face of *societal evils* such as slavery, serfdom, corruption and tyranny. They were just as helpless in the face of *natural evils* such as the endless afflictions of an endless array of illnesses, the devastations of irreparable bodily injuries and natural catastrophes such as drought and famines. Devastating plagues and epidemics seem to come out of nowhere, causing havoc and calamity. Nothing is known of sanitation and hygiene. Nothing is known of antibiotics. There are always many who see in this, divine punishment for some or the other of someone's alleged sins. Ignorance and superstition were everywhere. Few knew how to read and there was little for anyone to read.

Most people were tied to the land whether as slaves or serfs. Legally and by custom, they were little more than property. They earned their livings by working the land or by providing services such as smithing for those who did. They were expected to work for those who make war or manage the affairs of religious institutions. Other than outlaws, those who worked the land were

at the lowest levels of hierarchically arranged societies. There were a small number of people who engage in commerce, but they were often viewed as pariahs. Those who matter, are the nobilities and higher clergy. They, for the most part, control the land worked by their slaves and serfs, own both, and use what is produced to preserve and enhance their military and ecclesiastically based lifestyles.

This arrangement was supported by religious institutions which had, as one of their tasks, the sanctification of the existing economic and political arrangements. In St. Thomas' time and place, the established religion had, as another of its tasks, the collection and preservation of codified belief and accepted wisdom. In Christendom, the core and most foundational of them are the Bible, accepted Bible commentaries, Church documents and what little is known, in Europe, of the writings of the most prestigious philosophers of ancient times, the pagan Greeks, such as, Plato and Aristotle. Some Logic and Rhetoric, surviving from ancient times is known, but little else. At this time, to the East, cultivated Arabs were interested in mathematics and science, but they had little impact, so far, in Italy, let alone in the rest of Christian Europe.

Aquinas was a member of a religious order, and has studied Aristotle. Thus, he was aware of the pagan Greek preference for **Reason** over belief consecrated by custom, tradition and force. He was aware of the concern, even fear, shared by powerful constituencies in the Church, that **Faith** and **Reason** often conflict. He knew that until his own time, **Faith**—the sacred, the sanctified and the established— has been held ultimate in fixing both belief and action.

Officially, **Faith is the final determinate of truth.**

Yet, Aquinas broke with his own medieval past. He went beyond St. Augustine, reaching back to the pagan Greeks, especially to Aristotle. And in re-forging the link to the past in the **Great Chain of Reason**, he achieved a transformation in thinking with far ranging impact on the future. In resuscitating **Reason**, Aquinas re-opened the gates to a path leading directly to our own time, place and beyond.

Aquinas wrote that Revelation, thus **Faith**, should be supported by **Reason**. Even the most foundational of cultural and religious belief should be subject to the evidence of the senses and logic—ideas that would have pleased Aristotle.

Thus, St. Thomas advocated the reinstatement of **Reason** as a test of truth. Belief, bolstered by **Faith**, authority and tradition, he advocates, should be supplemented, by being opened to rational examination, by **Reason**. Well aware of the perceived threat inherent in this view, St. Thomas held that the pious need not feel threatened. It can be shown that **Faith** and **Reason** are entirely at one and mutually supportive. **Reason** will actually strengthen **Faith**. St. Thomas proposed that when it comes to deciding on what is True, **Faith and Reason have equal weight**. Belief, even ultimate and foundational Belief, should be justifiable on the basis of evidence and logic as well as by **Faith**. **Faith** and **Reason** should share ultimate priority. Thus, it becomes St. Thomas' self-chosen task not just to accept the existence of a First Cause or Creator, but to *prove* it.

Are his *proofs* successful? Perhaps. Everyone who reads them must make up their own mind. But our debt to Aquinas', to both his intellect and his courage, also lies elsewhere: Once on the path of expecting Belief to be supported *Reason*, those who walk it, the faithful as well as the skeptics, will find it hard to turn back.

Section 4: Berkeley, Hume and the British Enlightenment

4.1 Bishop Berkeley ((1685-1753): The Complete Skeptic

Skepticism: If the doctrines and dogma of the venerable are imperfect, subject to examination and evaluation by *Reason*, what about popular beliefs rooted in everyday experience—good old common sense?

Bishop George Berkeley, was an Irish prelate and philosopher who wanted to show that our basic, seemingly unchallengeable commonsense beliefs, even the most primary, such as belief in the existence of matter, of a real—persisting world, independent of our conscious experience—is far more challengeable, far more open to doubt on the basis of *Reason*, than most people think. Bishop Berkeley knew of the fate suffered by Socrates for his relentless questioning. He knew too that the popular beliefs he challenged are so well, so deeply ingrained, that people think it either trickery or utter insanity to question them.

Yet, Bishop Berkeley challenged belief in the self-evident, plain indubitability of so-called common sense by showing:

- (1) Along with superstition, belief in the existence of matter exceeds the evidence for it and
- (2) When taken together, so-called common sense beliefs are inconsistent and incoherent. They defy both experience and logic.

Bishop Berkeley's *Dialogues between Hylas and Philonous* were designed to show that this ordinary "common sense," meaning by that term "popular belief" is easily shown to be nonsensical, thus not "common sense" in the sense of "sound judgment." When subjected to the severe tests of *Reason*, even our most basic, widespread, universal and seemingly absolutely, irrevocably grounded, indubitable beliefs can be challenged and often, can be shown to be unjustifiable on the basis of evidence, and illogical. What is accepted, established, unchallengeable truth, seemingly validated universally, is not necessarily so.

Reason, when applied, seems to support *skepticism*. Our most basic beliefs, taken universally as "just plain, obvious common sense," as certitudes beyond question about the nature of reality may turn out to be unexamined myth, nothing more than folklore. A careful examination of the common facts of experience and our most common beliefs about the nature of reality reveals that we do not have sufficient ground for belief, even in the existence of matter.

For Bishop Berkeley, **certainty itself is indefensible**. When *Reason* differs with popular belief,

no matter how widespread and seemingly established, *Reason* must settle questions both about truth, and even about whether obtaining truth is possible.

4.2 David Hume (1711-1776) The Ultimate Empiricist

Like Berkeley, David Hume, a Scottish philosopher and historian, taught that human knowledge depends upon sense experience, which of course, is always subject to error. No human being therefore, is in a position to know anything with certainty, or even with much more certainty than does anyone else.

What Bishop Berkeley does for “common sense” in the sense of “popular belief,” Hume does for the high cultural beliefs of the educated. In Hume’s writings, Theology and much Philosophy related to Theology, are subjected to careful analysis. Hume, is especially interested in the view that the existence of a First Cause can be rationally proven, using the concepts and methods of Reason.

Against this, Hume maintains that all these proofs, despite their initial persuasiveness and learned language contain simple, even glaring logical fallacies. In Hume’s *Dialogues Concerning Natural Religion*, for example, he argues that all the ‘proofs’ fatally fail to understand the nature of causation and analogical Reasoning.

But, according to Hume, it is worse than that. As the *Problem of Evil* shows, belief in the existence of an Intelligent First Cause is inconsistent and incoherent. There can be no rational approach to Theology since nothing can be settled by *Reason*. All we are left with is *Faith* in something we cannot hope to validate or even understand, because it is entirely beyond human experience. *Faith* and *Reason* often conflict and the conflict is not resolvable. For Hume, *Faith* and *Reason*, must be kept entirely separate. When they conflict, one must give way. Either *Reason* or *Faith* must be primary and we must choose between them.

Faith is about what is not—and what cannot be—experienced. It is, literally about what is supernatural. *Faith* may give some humans grounds for a fierce kind of certainty, free from the tests of *Reason*. It may give them comfort and hope despite the anxieties derived from experience. This is *Faith*, which cannot be reconciled with *Reason*.

But, according to Hume, the natural is about what can be experienced. When it comes to fixing belief about the world of experience, only experience and logic—Reason— counts. In this world, Reason is paramount. Of course Reason is prone to error. All humans are subject to it. Thus, in the experienced world, an attitude of skepticism—of relentless questioning and doubting— of experiencing and testing and refining experience is more appropriate than one of piety.

Section 5: The Impact of These Ideas on the Course of Western Culture and Beyond

From St. Thomas Aquinas, to the Renaissance to the Enlightenment and continuing to our own day, the spirit of *skepticism* and *Reason* became embedded in the minds of educated Western Europeans. Western culture and civilization were transformed. No longer just another tradition

and custom-bound part of our humanly inhabited planet, Western Culture became the locus of brilliant innovation and creativity, first due to the energy and drive of gifted individuals unlocked from the shackles of enforced Orthodoxy, then through the widespread institutionalization of their methods and values and the preparation of their successors through systematic education and training.

Of course the ideas of the thinkers we have been studying were not the only ideas that energized Western Civilization. But they sparked a new fascination with independent thinking, observing doing, exploring, experimenting and inventing. Soon after St. Thomas, Italy, flowered into the Renaissance. This humanistic revival of art, architecture, literature, learning, scientific experiment, invention and exploration soon spread throughout Western Europe, further accelerating the transition from a medieval and past bound society to modern and dynamic civilization. In the fifteenth century, Vespucci and Columbus, both Italian sailors, were to begin the voyages of exploration fostering an atmosphere of enthusiasm for adventure that led to even more exploration that changed everything and led to even more exploration beyond our planet.

These ideas and discoveries became part of a larger interlocking network, imbued with science and technology. Whatever their differences of interest or subject all came to share a passion for careful observation, trained experimentation, sophisticated reckoning, rigorous criticism, coherent organization and relentless questioning, valued over tradition, authority, fixed teachings and claims to absolutely certain truth.

Skepticism, now established as a critical value, along with the clear evidence of its successful application in science, invention, exploration and technology, spurred innovation and change in every aspect of human life. It did this, not just in the natural sciences, but in the arts, literature, government, economics education and the study of societies.

Now, thoughtful people everywhere began to apply ***skeptical*** and questioning attitudes in conjunction with the tests of ***Reason*** to beliefs about everything. Business, once the niche of a few pariahs and adventurers, was soon studied in schools dedicated and specialized for the purpose. Government and military affairs, once the privileged occupation of warriors and robber barons, who prided themselves more on their cruelty and courage on than their ability to think, was now studied in academies, all inspired by Aristotle, Aquinas and Hume in their reliance on ***Reason***. Finally, skepticism, now internalized and respected institutionalized skepticism, even about itself.

5.2 The Current Scene in the West

Though St. Thomas could not foresee to what his ideas would lead, his philosophical outlook, his commitment to ***Reason***, inspired the transformative process of ***modernization***, making a whole culture receptive to all sorts of ideas, eagerly seeking and welcoming, rather than fearing ideas, demanding and selecting those that passed the most rigorous tests. His contribution was not just to our knowledge, but, more important, to our outlook and values.

By the second half of the nineteenth century, the world affected by Socrates, Aristotle, Aquinas, the Renaissance and the Enlightenment began to look and feel entirely different from the tradition-bound rest of the world, still dominated by custom, authority, tradition and reliance on *Faith*.

Even the most casual travelers could see this in stark contrast as they journeyed from west to east. They could see it in the West in the way technology pervaded every aspect of life and then in the rest of the world, where people lived, unchanged for millennia. They could see it in the contrast between higher levels of hygiene in the West and the squalor of the East.

They could see it in the growth of democracies and market economies in contrast with the persistence of feudal governments and economies in the East. And they could see it in the kinds and levels of education ever more widely accessible in the West, in contrast with the pervasive ignorance and superstition and rote learning of the East, when any learning took place at all.

They could even see it in Western dress and costume—in the universal pleasure taken in the aesthetics of change, fashion, style and variety vs. the persistence of tradition-bound sumptuary restrictions and the rigid coercive prescription of every aspect of lifestyle. They could see it in the West, in the revived interest in sports—in the pleasures of the physical body and in physical excellence, as opposed to physical shame and concealment.

And they could see it in the differences between cultures in which people are encouraged to think and act for themselves vs. cultures in which thought control is rigidly enforced and deviation harshly punished.

5.3 Impact on the Rest of the World

Thoughtful non-Westerners could appreciate the benefits of acquiring at least some of the West's distinctively modern features for their own cultures. The Japanese quickly realized the value of industrial and military technology. Other cultures either resisted or were internally conflicted as factions fought—and still fight today—to introduce or resist Western modernization. India, under the influence of Gandhi, welcomed democracy but resisted industrialization. Not until the coming of today's high technology industries was India to attempt to compete with the West. China was torn apart by nearly a century of Civil War as the forces of tradition and modernization contested violently, its drive to modernize only now starting to become visible.

Among those who found Western modernization attractive, it is significant that Gandhi, Ho Chi Minh and Mao were Western educated, as were Sun Yat Sen, Chiang Kai-shek and the ever growing number of students who come to the West to study and learn. Yet, while many saw modernization as a force to be welcomed for their own peoples and societies, others, well aware of its socially transformative powers still condemn Westernization as an alien and sinister force. Many of the malcontent, particularly in Islamic lands, are now mobilized to resist to the bitter end.

What do they find disturbing? It is not necessarily technology, still so much the bane of Romantics and other social critics within Western culture. Indeed, many of today's anti-Westernizers find

technology among the most attractive of Western imports, especially military technologies that can be used enhance their own brands of resistance and control. What they find offensive, according to them, are many of the consequences of incorporating Western values and attitudes of skepticism and *Reason* that lead to the examination of religious, social and political ideas and institutions, and therefore put pressure on elites vying for dominance.

Here are some of the changes one might expect from the adoption of the primacy of skepticism and *Reason*:

- ▶ Secularization of Society:
- ▶ Separation of Church and State
- ▶ Transparent, accountable representative government.
- ▶ Social and economic standing and advancement by merit.
- ▶ Popular democracy
- ▶ Constitutional government
- ▶ Equality of all before the law.
- ▶ Free organization of Labor
- ▶ Universal access to education
- ▶ Sexual, racial, ethnic and religious freedom and equality
- ▶ Widespread access to the benefits of science, medicine and technology.
- ▶ Historically unprecedented health, wealth and high standard of living for more people than ever.
- ▶ Widespread personal freedoms.
- ▶ Rationalization of the activities of the
 - ▶ State
 - ▶ Law
 - ▶ Economy
 - ▶ Education
 - ▶ Agriculture
 - ▶ Medicine
 - ▶ Public Policy

5.3 An Explanation of non-Western Resistance

Why should these advantages which we take so casually, frighten others so that they prefer violence to keep these changes from their cultures, people and countries, even before their people have had a chance to experience them?

Some plausible explanations might begin by recalling that these aspects of our lives, so much taken now by us as ‘givens’ did not come to us easily, nor were they made available willingly by those in the West who, at the time, might have been able to do so. In our own society new ideas and the changes in ways of life they suggested were—time and again— bloodily contested.

The New World had to break away from the Old by violent revolution to achieve independence and democracy. Yet, in the New World, despite the sentiments expressed in the Declaration of

Independence, abolition, universal suffrage, equal rights, unionization and the privatization of sexual choice were—and sometimes still are violently opposed. Clearly, ideas have consequences.

Section 6: Summary and Conclusion

6.1 The philosophers we are studying, by intellectually challenging the established thinking patterns of their times, learned and popular, helped set in motion a desire to understand the world anew, based on *Reason*, and this fueled the questioning and rethinking of every aspect of human study, even founding new ones.

This hunger for new knowledge and understanding led to the discovery of vast new worlds, on, in and off the planet. It led to the discovery of North and South America, Australia and the Polar continents, to the vast worlds revealed by microscopic and macroscopic inventions, all of which no one earlier had even dreamed and which challenged idea systems based upon ignorance, superstition and misconception. It also challenged the preeminence of those who claimed to speak with certitude and authority on the basis of the old superstitions.

Finally, in the West, with the acceptance of the machine, science and technology, the age of the ox, the slave and the serf was truly over, since there was no need for captive labor, animal or human. Indeed, captive labor couldn't compete with the new machines and technologies. In the shortest of times, even the ancient words 'master' and 'servant' were to become obsolete. Soon people even questioned why those whose skin was of a lighter pigment or male should have more of the power and a bigger piece of the pie than others, only to find there were few answers that survived the test of *Reason*.

The philosophers we studied repaired the ruptured intellectual link with our ancient Greek and Roman heritage and its commitment to Reason. At the same time, doing so forged new links, reaching forward to an open society, creating an open future that influences every moment and aspect of our own ever-changing lives, yet returns to ground us firmly to our cultural roots, whatever our ethnic heritage.

A spirit of *skepticism* and *Reason*, it turns out, now influence every aspect of our lives. That includes the big things, war and peace, the government the laws under which we live, the credibility of our leaders and the education we get, including that we get an education at all. At school, it influences the courses we take and the careers open to us as a result, since many of them did not even exist fifty, let alone five hundred years ago. *Skepticism* and *Reason* bear on our health, wealth and the minutiae of our personal choices. How many of us are aware that this spirit influence how we dress, who and how we date and mate, and that we date at all?

Skepticism and *Reason*—seemingly abstract, seemingly without practical interest or utility, nonetheless link together a chain—backward and forward—a *Great Chain of Reason*. Philosophy makes us aware of what they are and their value for us, today and always. History teaches us the stakes: In both, we learn of the critical roles *skepticism* and *Reason* play, directly

for us, in the high stakes that will flow from today's great events, for we learn what we and the world can gain by their nurturance and what we can lose by their extinction.

END
